Material Safety Data Sheet

Material Name: TURCO SOLV **ID: 239367**

*** Section 1 - Chemical Product and Company Identification ***

Product Trade Name TURCO SOLV

Manufacturer Information

Henkel Surface Technologies
Henkel Corporation
32100 Stephenson Highway
Madison Heights, MI 48071

Contact Phone: (248) 583-9300

Chemtrec Emergency # (800) 424-9300

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent
8052-41-3	Stoddard solvent	30-60
79-01-6	Trichloroethene	30-60
64742-95-6	Light aromatic petroleum solvent naptha	1-10
75-09-2	Methylene chloride	1-10
111-76-2	2-Butoxy ethanol	1-10

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: F039-Hazardous wastes, Glycol ethers.

*** Section 3 - Hazards Identification ***

Emergency Overview:

WARNING! MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.
SUSPECT CANCER HAZARD. CONTAINS MATERIAL WHICH MAY CAUSE CANCER
Risk of cancer depends on duration and level of exposure
MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE AND LOSS OF CONSCIOUSNESS AND DEATH AT HIGH VAPOR CONCENTRATIONS. MAY CAUSE CARBOXYHEMOGLOBINEMIA, DECREASING OXYGEN IN THE BLOOD. MAY CAUSE EFFECTS ON RED BLOOD CELLS BASED ON ANIMAL DATA MAY CAUSE KIDNEY DAMAGE FOLLOWING REPEATED EXPOSURE BASED ON ANIMAL DATA CAUSES LIVER AND HEART DAMAGE

Eye Contact:

This product may be severely irritating to the eyes.

Skin Contact:

This product may be harmful if it is absorbed through the skin.

Ingestion:

This product may be harmful if it is swallowed.

Inhalation:

Excessive inhalation of this product may cause headache, dizziness, blurred vision, nausea and vomiting.

Potential Health Effects:

Acute overexposure can cause nervous system depression and damage to the kidneys, blood, nerves, liver and lungs. Possible cancer hazard. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

*** Section 4 - First Aid Measures ***

Eye Contact:

Immediately flush with plenty of water for at least 15 minutes. Get medical attention.

Issue Date: 04/23/02 Revision: 2.0000

If On Skin

Immediately flush with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion:

Do NOT induce vomiting. Give water to drink. Get medical attention immediately NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically

* * * Section 5 - Fire Fighting Measures * * *

Flash Point:	>210 °F	**Method Used:**	COC	**Flammability Classification:**	
Upper Flammable Limit (UFL):	NE	**Lower Flammable Limit (LFL):**	NE		

Fire & Explosion Hazards:

Thermal decomposition may produce toxic oxides of carbon and chlorine, acid gases and toxic organic compounds.

Extinguishing Media:

Use carbon dioxide, foam or water fog

Fire-Fighting Instructions:

Firefighters should wear full protective clothing including self contained breathing apparatus.

* * * Section 6 - Accidental Release Measures * * *

Spill or Leak

Contain spill. Stop leak at source if this can be done safely. Ventilate area. Nonessential personnel should leave the area until cleanup is completed. Pump liquid into DOT-approved drums for disposal. Absorb remaining liquid onto inert absorbent and place in DOT approved drums for disposal. Wash area with water. Keep concentrate and wash water from entering sewers or waterways.

* * * Section 7 - Handling and Storage * * *

Handling Procedures:

Do not get in eyes, on skin or clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not use 1,1,1-trichloroethane, methylene chloride, perchloroethylene, or other halogenated solvents or mixtures containing halogenated solvents or mixtures with pressurizable fluid handling equipment such as airless spray equipment containing aluminum or galvanized wetted parts. Direct contact between aluminum or galvanized metal and these or other chlorinated solvents could result in an uncontrollable chemical reaction and possible explosion.

Storage Procedures:

Store in a cool, dry place. Avoid excessive heat. Store out of direct sunlight in a cool, well-ventilated place. Do not store above 120 °F.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Stoddard solvent (8052-41-3)

ACGIH: 100 ppm TWA
OSHA: 500 ppm TWA; 2900 mg/m3 TWA
NIOSH: 350 mg/m3 TWA
1800 mg/m3 Ceiling

Trichloroethene (79-01-6)

ACGIH: 50 ppm TWA
100 ppm STEL
OSHA: 200 ppm Ceiling
100 ppm TWA
200 ppm STEL; 1080 mg/m3 STEL

Methylene chloride (75-09-2)

ACGIH: 50 ppm TWA
OSHA: 25 ppm TWA (8 hr.); 125 ppm STEL (15 min.); 12.5 ppm Action Level (see 29 CFR 1910.1052)

2-Butoxy ethanol (111-76-2)

ACGIH: 20 ppm TWA
OSHA: prevent or reduce skin absorption
50 ppm TWA; 240 mg/m3 TWA
NIOSH: 5 ppm TWA; 24 mg/m3 TWA
Potential for dermal absorption

Engineering Controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

PERSONAL PROTECTIVE EQUIPMENT

As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1910.132), employers must perform a Hazard Assessment of all workplaces to determine the need for, and selection of, proper protective equipment for each task performed.

Eyes/Face Protective Equipment:

Where there is potential for eye contact, wear chemical goggles.

Skin Protection:

Use impervious gloves. Use of impervious apron and boots are recommended. Gloves should be tested to determine suitability for prolonged contact.

Respiratory Protection:

If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided. Respiratory protection programs must comply with 29 CFR § 1910.134.

Work Practices:

Eye wash fountain and emergency showers are recommended.

* * * Section 9 - Physical & Chemical Properties * * *

Physical State:	Liquid	**Appearance:**	Thin, clear, colorless liquid
Odor:	Mild	**Vapor Pressure:**	Not Determined
Boiling Point:	115 °F (46 °C)	**Specific Gravity:**	0.98 at 193 °F (75 °C)
pH:	NA	**Viscosity:**	
VOC:	92%	**Solubility Water:**	>10%
Percent Solids:	<1%		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability:

This material is chemically stable under normal and anticipated storage and handling conditions.

Incompatibility:

Contact with strong oxidizing agents, strong acids, strongly heated reactive metals.

Decomposition Products:

Hydrogen chloride, toxic compounds of carbon, chlorine and/or oxygen Carbon monoxide, dioxide, other toxic volatile organic compounds.

Hazardous Polymerization:

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Toxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Trichloroethene (79-01-6)
Inhalation LC50 Mouse: 8450 ppm/4H
Oral LD50 Rat: 5650 mg/kg
Oral LD50 Mouse: 2402 mg/kg
Dermal LD50 Rabbit: >20 gm/kg

Light aromatic petroleum solvent naptha (64742-95-6)
Oral LD50 Rat: 8400 mg/kg

Methylene chloride (75-09-2)
Inhalation LC50 Rat: 52 gm/m3
Inhalation LC50 Mouse: 14400 ppm/7H
Oral LD50 Rat: 1600 mg/kg

2-Butoxy ethanol (111-76-2)
Inhalation LC50 Rat: 450 ppm/4H
Inhalation LC50 Mouse: 700 ppm/7H
Oral LD50 Rat: 470 mg/kg
Oral LD50 Mouse: 1230 mg/kg
Dermal LD50 Rabbit: 220 mg/kg

Carcinogenicity:

A: General Product Information

POSSIBLE CANCER HAZARD: This product contains material which may cause cancer.

B: Component Carcinogenicity

Trichloroethene (79-01-6)

ACGIH: A5 - Not Suspected as a Human Carcinogen
NIOSH: occupational carcinogen
NTP: Suspect Carcinogen (Possible Select Carcinogen)
IARC: Monograph 63, 1995 (Group 2A (limited human data))

Methylene chloride (75-09-2)

ACGIH: A3 - Animal Carcinogen
OSHA: 25 ppm TWA (8 hr.); 125 ppm STEL (15 min.); 12.5 ppm Action Level (see 29 CFR 1910.1052)
NIOSH: occupational carcinogen
NTP: Suspect Carcinogen (Possible Select Carcinogen)
IARC: Monograph 71, 1999; Supplement 7, 1987; Monograph 41, 1986 (Group 2B (sufficient animal data))

Chronic Toxicity

No information available for the product.

Epidemiology:

No information available for the product.

Neurotoxicity:

No information available for the product.

Mutagenicity:

No information available for the product.

Teratogenicity:

No information available for the product.

*** Section 12 - Ecological Information ***

Ecotoxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Trichloroethene (79-01-6)

Test & Species		Conditions
LC50 (96 hr) fathead minnow	44.1 mg/L	

Methylene chloride (75-09-2)

Test & Species		Conditions
LC50 (96 hr) fathead minnow	330 mg/L	
LC50 (96 hr) rainbow trout	10.95-15.32 mg/L	Flow-through, 13.3 °C, pH 7.8, 106 mg/L.
LC50 (96 hr) bluegill	220 mg/L	
	15 min EC50 Photobacterium phosphoreum 1000 mg/L	
EC50 (48 hr) water flea	140-330 mg/L.	Static, 21-23 °C, pH 6.8-7.2, 66-79 mg/L CaCO3.

2-Butoxy ethanol (111-76-2)

Test & Species		Conditions
LC50 (96 hr) bluegill	1490 mg/L	Static, 23 °C.
LC50 (24 hr) goldfish	1650 mg/L	
LC50 (24 hr) water flea	1720 mg/L.	

Environmental Fate:

No data is available concerning the environmental fate, biodegradation or bioconcentration for this product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Numbers & Descriptions:

A: General Product Information

This product contains a component identified as hazardous under 40 CFR 261.24.

B: Component Waste Numbers

Trichloroethene (79-01-6)

RCRA: waste number U228
waste number D040; regulatory level = 0.5 mg/L

Methylene chloride (75-09-2)

RCRA: waste number U080

Disposal Instructions:

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

* * * Section 14 - Transportation Information * * *

US DOT Information

Shipping Name: Please refer to the container label for transportation information.

* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Trichloroethene (79-01-6)

SARA 313: form R reporting required for 0.1% de minimis concentration
CERCLA: final RQ = 100 pounds (45.4 kg)

Methylene chloride (75-09-2)

SARA 313: form R reporting required for 0.1% de minimis concentration
CERCLA: final RQ = 1000 pounds (454 kg)

2-Butoxy ethanol (111-76-2)

SARA 313: form R reporting required for 1.0% de minimis concentration; Chemical Category N230; (applies to R-(OCH2CH2)n-OR"" ethers, where n = 1,2, or 3""; R=alkyl C7 or less or R = phenyl or alkyl subst. phenyl; R"" = H or alkyl C7 or less, or OR"" consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate) (related to Glycol ethers)

CERCLA: (Includes mono- and di- ethers of ethylene glycol; diethylene glycol and triethylene glycol R-(OCH2CH2)n-OR" where n = 1 2 or 3; R = alkyl or aryl groups; R" = R h or groups which when removed yield glycol ethers with the structure R-(OCH2CH2)n-OH. Polymers are excluded from glycol category); Statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to Glycol ethers)

SARA 311/312: Acute: Y **Chronic:** Y **Fire:** N **Pressure:** N **Reactive:** N

State Regulations

A: General Product Information

No additional information available.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Stoddard solvent	8052-41-3	Yes	Yes	Yes	Yes	Yes	Yes
Trichloroethene	79-01-6	Yes	Yes	Yes	Yes	Yes	Yes
Methylene chloride	75-09-2	Yes	Yes	Yes	Yes	Yes	Yes
2-Butoxy ethanol	111-76-2	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
WARNING! This product contains a chemical known to the state of California to cause cancer.

Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: Component Analysis - InventoryComponent Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Stoddard solvent	8052-41-3	Yes	Yes	Yes
Trichloroethene	79-01-6	Yes	Yes	Yes
Light aromatic petroleum solvent naptha	64742-95-6	Yes	Yes	Yes
Methylene chloride	75-09-2	Yes	Yes	Yes
2-Butoxy ethanol	111-76-2	Yes	Yes	Yes

: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Stoddard solvent	8052-41-3	1%; English Item 1468; French Item 1498
Trichloroethene	79-01-6	1%; English Item 1612; French Item 1646
Methylene chloride	75-09-2	0.1%; English Item 1044; French Item 508
2-Butoxy ethanol	111-76-2	1%; English Item 721; French Item 824

* * * Section 16 - Other Information * * *

NFPA Ratings: Health: 3 Fire: 1 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
HMIS Ratings: Health: 3* Fire: 1 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Henkel Surface Technologies bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

Contact: Regulatory Affairs and Product Acceptance
Contact Phone: (248) 583-9300

This is the end of MSDS # 239367